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INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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COUNTRY	USSR (Moscow Oblast)	REPORT	
SUBJECT	First and Second State Ball Bearing Plants in Moscow	DATE DISTR.	12 August 1960 50X1-HUM
		NO. PAGES	1
DATE OF INFO.			
PLACE & DATE ACQ			

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE. 50X1-HUM

2. Attachment 1 is a two-page report on the production of the Second State Ball Bearing Plant from 1947 to 1956. The report contains information on the production and labor force in the automatic lathe shop and the bearing ball shop. The report contains no sketches, either products or plant area.

3. Attachment 2 is a two-page report on the Moscow Ball Bearing Plant No.1. Plant production between 1950 and 1955 included:

   a. Microbearings less than 16 millimeters in diameter manufactured in a restricted shop 50X1-HUM

   b. Roller bearings about 15 millimeters thick with an outside diameter of 20 to 70 centimeters. A tolerance of not more than one-hundredth of a millimeter was permitted. There was often a shortage of material for large bearings.

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STATE	X	ARMY	#	X	NAVY	X	AIR	16	FBI		AEC		NSA	X	NIC	X

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

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COUNTRY: USSR (Moscow Oblast)

REPORT

SUBJECT: Moscow Ball Bearing Plant No. 1

DATE OF

DATE AC

DATE OF REPORT: 23 June 1960 50X1-HUM

MOSCOW BALL BEARING PLANT No. 1

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1.

2. Plant production included:

a) Microbearings less than 16 millimeters in diameter manufactured in a restricted shop 50X1-HUM

b) Roller bearings about 15 millimeters thick with an outside diameter of 20 to 70 centimeters.[1] A tolerance of not more than one hundredth of a millimeter was permitted. There was often a shortage of material for large bearings.

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3. [redacted] a large part of production went to the ZIS Plant in Moscow.

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[redacted]

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[redacted]

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COUNTRY: USSR (Moskovskaya oblast)

REPORT

SUBJECT: Production of the Second State Ball Bearing Plant

DATE OF

DATE A

DATE OF REPORT: 30 June 1960

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PRODUCTION OF THE SECOND STATE BALL BEARING PLANT

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machined outer bearing rings had the following dimensions: outer diameter - 18 millimeters; inner diameter - 15 millimeters; thickness - five millimeters.

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Other sizes of outer bearing rings were:

	Outer diameter	Inner diameter	Thickness
Largest size	60 millimeters	40 millimeters	10 millimeters
Smallest size	6-7 millimeters	3-4 millimeters	1 millimeter

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The automatic lathe shop contained an unknown number of Soviet make automatic lathes, ~~from~~ three to five of which could be serviced by one operator. The shop employed about 120-150 workers on the first shift, 80 - 100 on the second, and about 50 on the third.

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3. The ball production shop had about 12 to 15 automatic lathes of various unknown types. One lathe operator serviced three to five lathes. The ball shop also had two furnaces for heat treatment and an unknown number of presses, polishing machines, and grinding machines. The ball shop employed about 150 workers on the first shift, 100 on the second, and about 50 on the third. during the first shift the ball shop produced about 50 steel boxes of bearing balls. The steel boxes, which were about 40 x 20 x 15 centimeters in dimension, each contained 25 kilograms of bearing balls. The total estimated production was about 1,250 kilograms per eight-hour shift. The second ~~work~~ shift produced about 30 to 35 boxes representing a total of about 850 kilograms of bearing balls. The third shift produced about 25 boxes, a total of about 625 kilograms. The total average daily (24-hour) production was three or four tons, or about 80 to 100 tons of bearing balls per month. The balls were manufactured in sizes from one millimeter to three millimeters in diameter.

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OTK Inspection Procedures

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4. The bearing balls were inspected after the pressing, polishing, heat treating, and grinding production phases. rotated a wooden tray on which the balls were placed and those which did not roll or which had no lustre were rejected.[1] There were many rejects and the rejection rate at all stages per eight-hour shift was from 15 to 25 kilograms of bearing balls. These rejects were placed in four-kilogram capacity cardboard boxes, 15 x 10 x 4 centimeters in dimension, and were later reinspected and reprocessed.

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5. The finished bearings were packed in wooden boxes 50 x 30 x 20 centimeters in dimension and shipped by truck to unknown destinations.

Comment:

1. inspection of the bearing balls produced in the ball manufacturing shop was performed at the end of each production phase with the use of micrometers and other measuring instruments, and later the bearing balls were X-rayed in the shop on the floor above the ball manufacturing shop.

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